

Marine Spatial Planning for Washington's Pacific Coast



Preliminary Draft Overview
WCMAC - February 15, 2017

Jennifer Hennessey, Erica Bates
& Ashleigh McCord

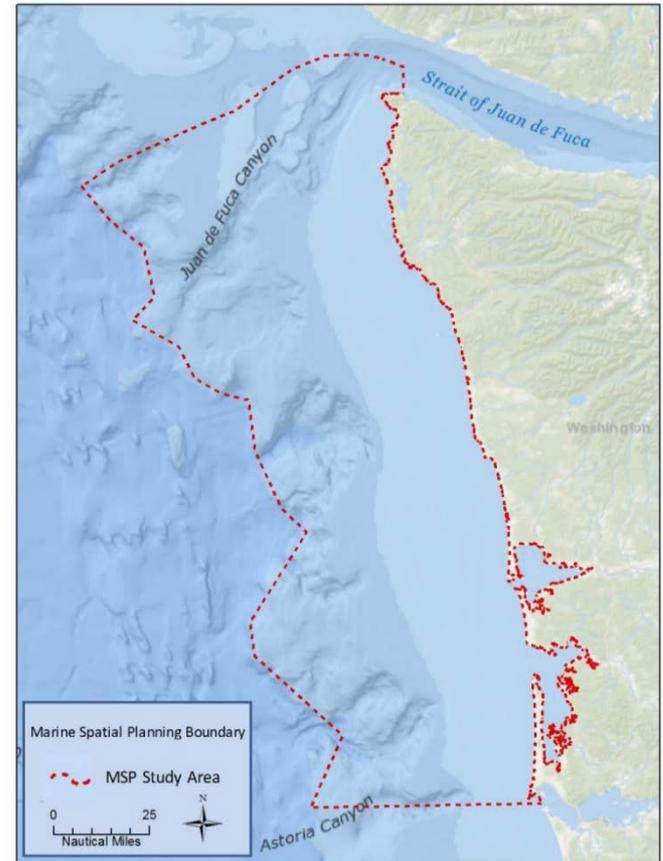
Marine Spatial Planning for Washington's Pacific Coast

Address potential new uses.

Plan goals/objectives:

- Protect existing uses
- Protect cultural uses/resources
- Preserve environment
- Integrate decision-making
- Provide new economic opportunities

Non-Regulatory Plan



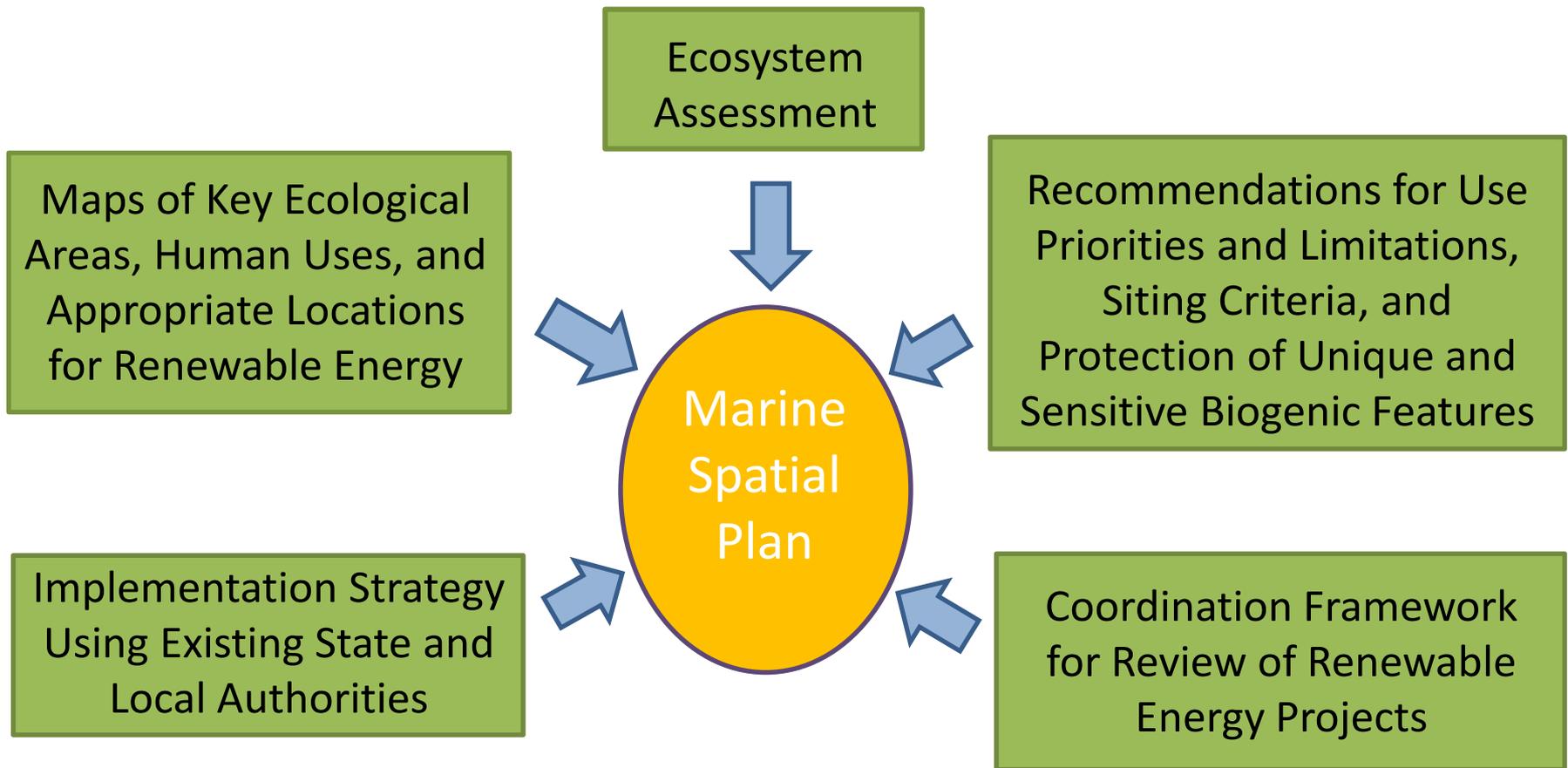
Study area is 700 fathoms offshore:
includes state and federal waters and estuaries.

How will the plan help?

- Better baseline information
- Ecosystem indicators to assess changes
- Analyses to support decision-making
- Recommendations for new uses
- Implementation framework across agencies



Plan Requirements



RCW 43.372.040(6)

Timeline

- Preliminary draft plan review (February – March 2017)
 - WCMAC and tribal feedback
- Draft plan and draft EIS (May 2017)
 - Public comment period
- Revise and adopt final plan (June 2017)



Preliminary Draft Review

- Purpose:
 - Understand how parts of the plan are coming together.
 - Provide early input to inform revisions for formal draft for public comment.
- How to comment:
 - Email: msspcomments@ecy.wa.gov



Plan Outline

Part 1

- Background and Purpose

Part 2

- Context Chapters (Current and Potential Uses)

Part 3

- Ecological & Use Analyses

Part 4

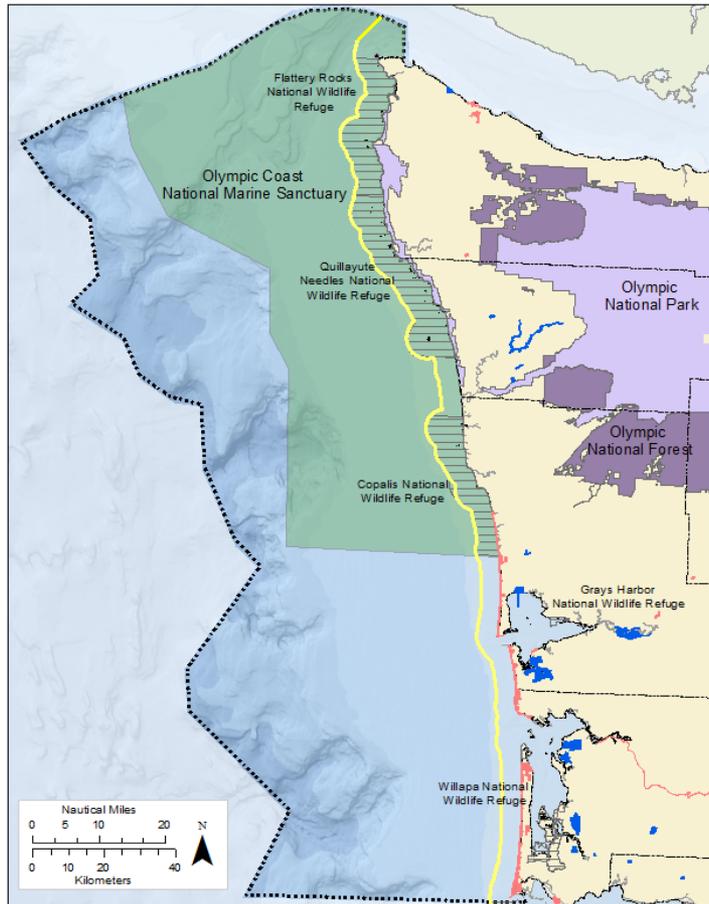
- Management Framework (Recommendations)

Part 5

- SEPA (separate document)

Part 1: Background

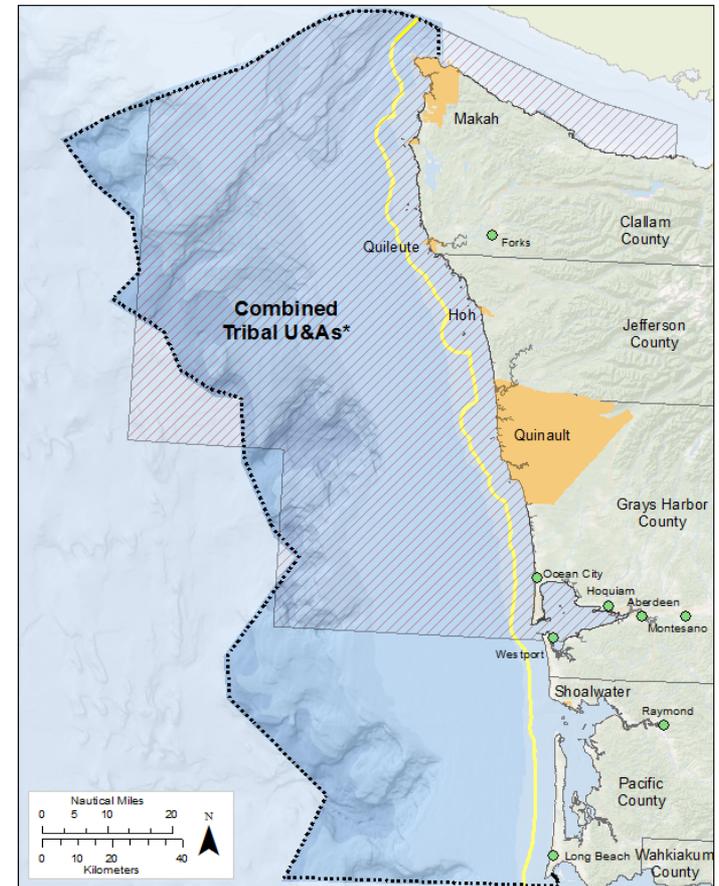
Map 1: MSP Study Area, Government and Conservation Areas



- National Park Service Lands¹
- National Forest Service Lands²
- State Park Seashore Conservation Areas³
- State DNR Conservation Areas⁴
- National Wildlife Refuges and Acquisition Areas⁵
- National Marine Sanctuary⁶
- MSP Study Area⁷
- State Boundary⁸
- County Boundary⁹

Map coordinate system: North American Datum of 1983 (NAD83), Washington South State Plane Coordinate System, meters. Not to be used for legal purposes.

Map 2: Cities, Coastal Tribal Reservations, and Combined Tribal Usual and Accustomed Areas (U&As)



- Washington Coastal Tribal Reservations¹
- Incorporated City²
- County Boundary³
- Washington MSP Study Area⁴
- WA State Boundary⁵
- Combined Tribal U&As⁶

⁶This represents the combined U&A footprints for the Hoh, Quileute, Quinalt and Makah tribes. Each tribe's individual U&A varies within this area.

Map coordinate system: North American Datum of 1983 (NAD83), Washington South State Plane Coordinate System, meters. Not to be used for legal purposes.

Part 2: Baseline Information

- Socio-Economics
- Archaeological and Historic Resources
- Ecology
- Current Ocean Uses
- Potential New Uses
- Climate Change

Includes context and maps



Ecology

Map 3: Modeled Bottom Types and Featured Canyons

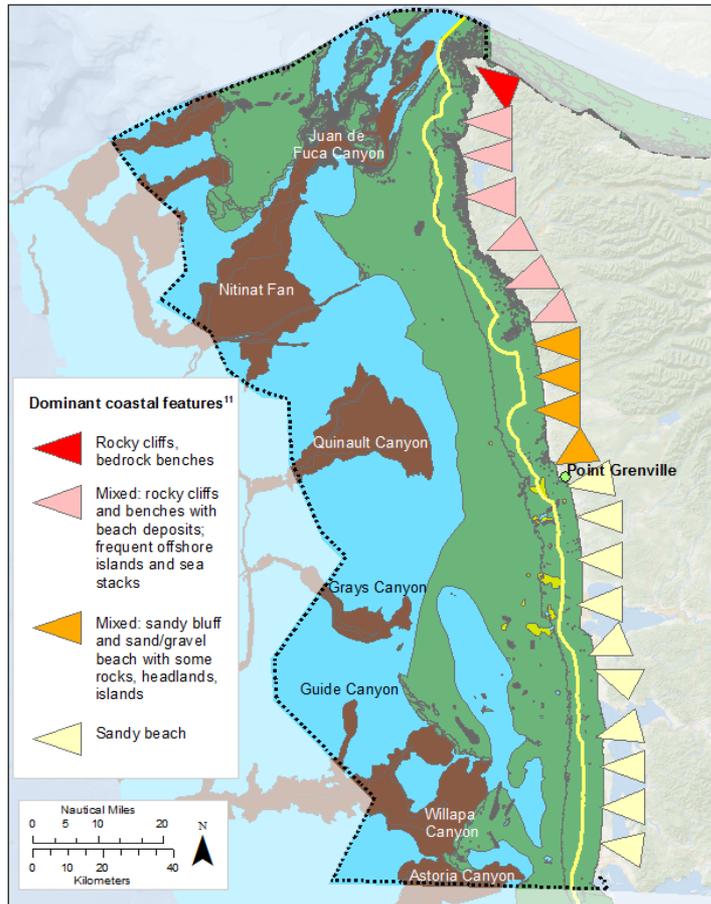
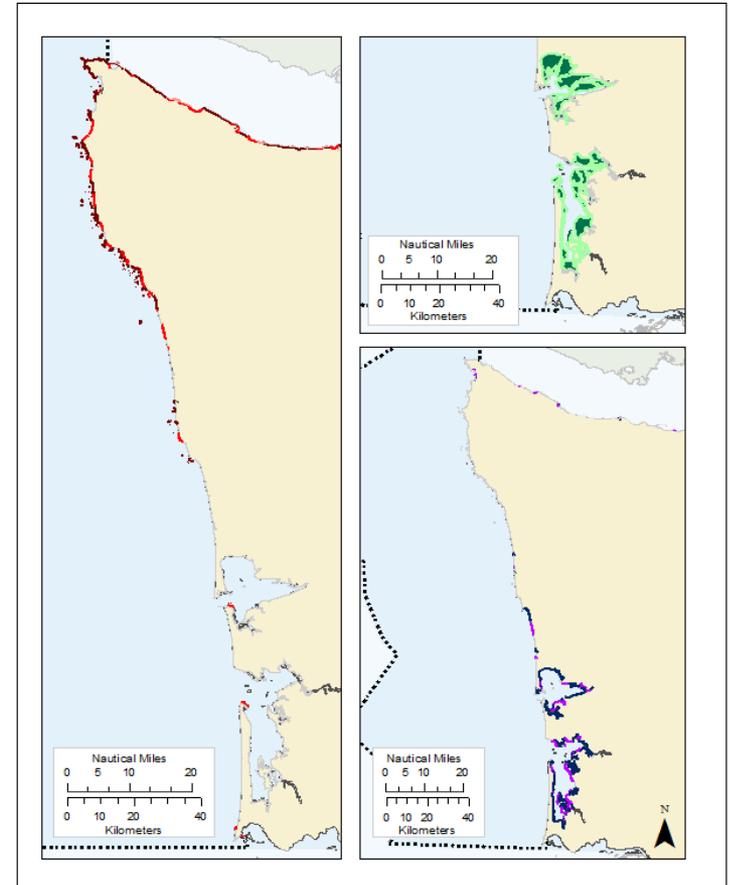


Figure 2.5: Kelp, Eelgrass, and Saltmarsh

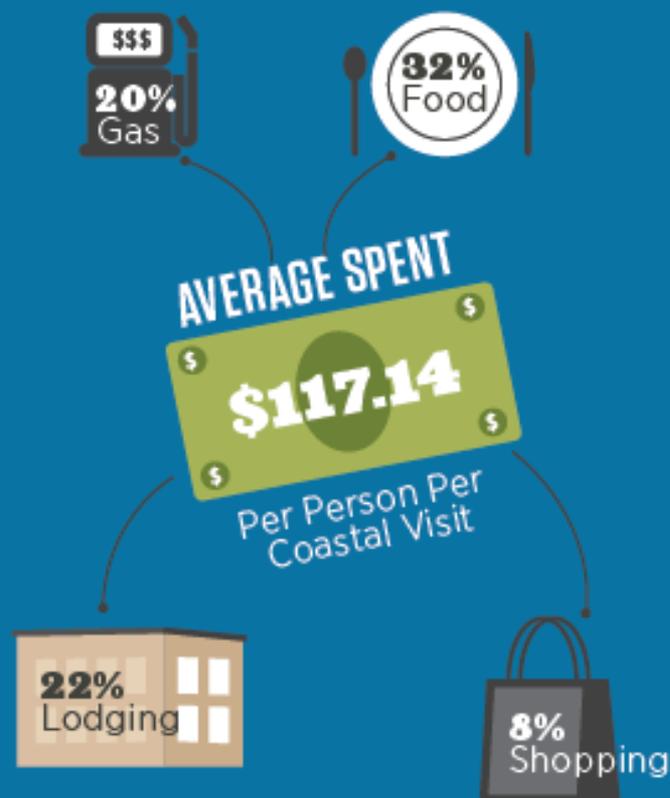


WASHINGTON COASTAL AND OCEAN RECREATION STUDY



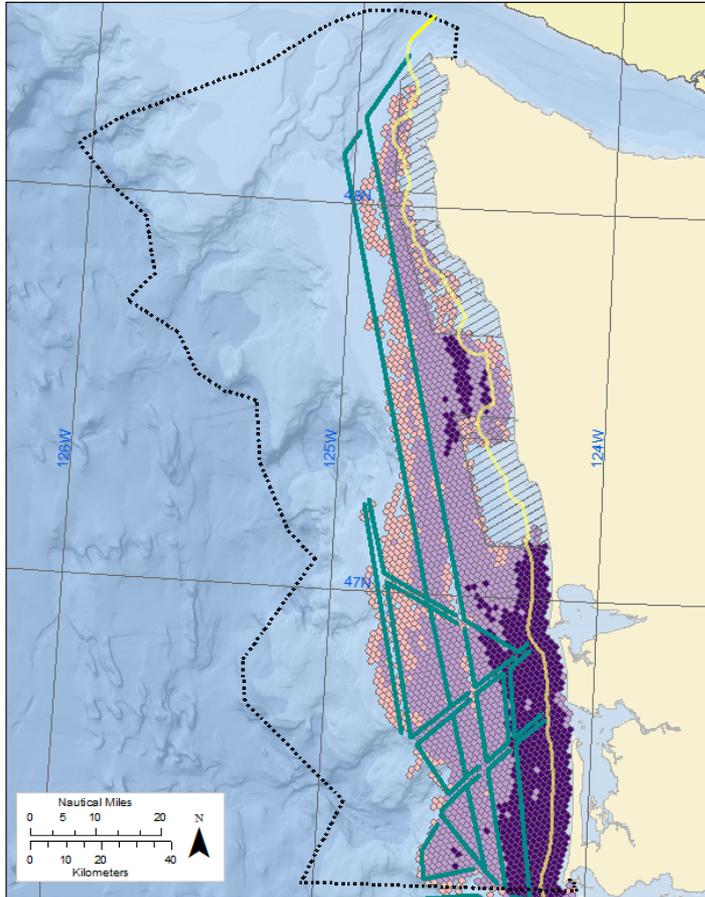
The Surfrider Foundation, in partnership with Point 97 and the state of Washington, conducted the Washington Coastal and Ocean Recreation Study in 2014, collecting economic and spatial data on "non-consumptive" recreational uses such as beach going, kayaking, wildlife viewing, hiking & biking, and surfing. **Access the full report: [washington.surfrider.org](http://www.washington.surfrider.org)**

MOST POPULAR ACTIVITIES



Fisheries

Map 23
Commercial Fishing: Dungeness Crab



Commercial Crabbing Intensity¹

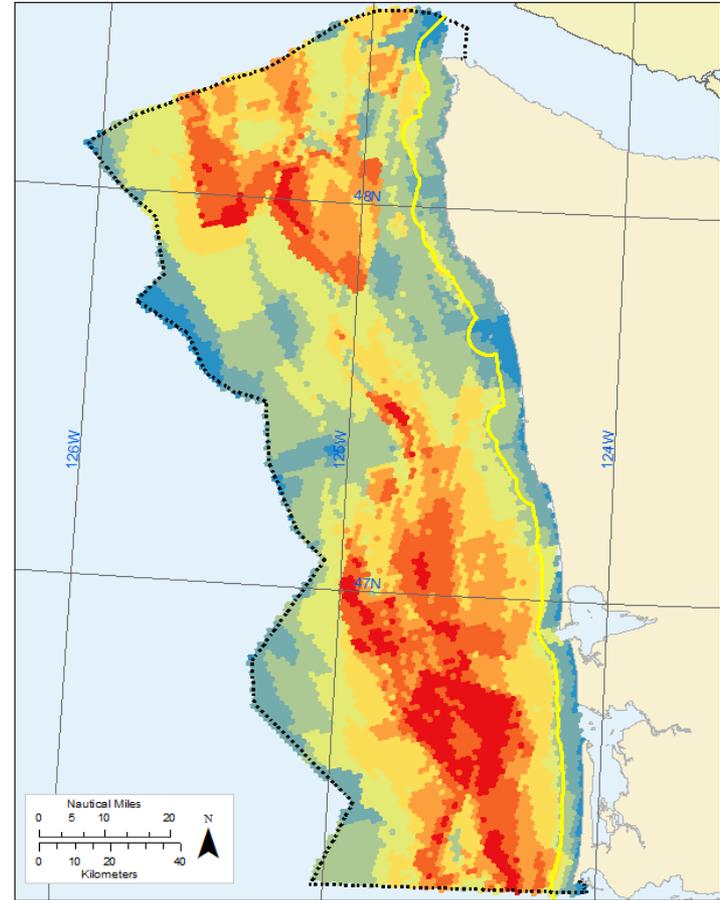
- Low
- Medium
- High

Special Management Areas²

- Towboat Lanes³
- WA State Boundary⁴
- Washington MSP Study Area⁵

Map coordinate system: North American Datum of 1983 (NAD83), Washington South State Plane Coordinate System, meters. Not to be used for legal purposes.

Map 55
Fishing Activity: All Commercial and Recreational



Commercial and Recreational Fishing Intensity¹

- 0-5
- 6-8
- 9-10
- 11-12
- 13-14
- 15-16
- 17-19
- 20-26

***Sum of intensity scores from all individual fisheries maps, where:**

- 1 = Low intensity
- 2 = Med intensity
- 3 = High intensity

WA State Boundary⁴

Washington MSP Study Area⁵

World Latitude and Longitude Grids⁶

Map coordinate system: North American Datum of 1983 (NAD83), Washington South State Plane Coordinate System, meters. Not to be used for legal purposes.

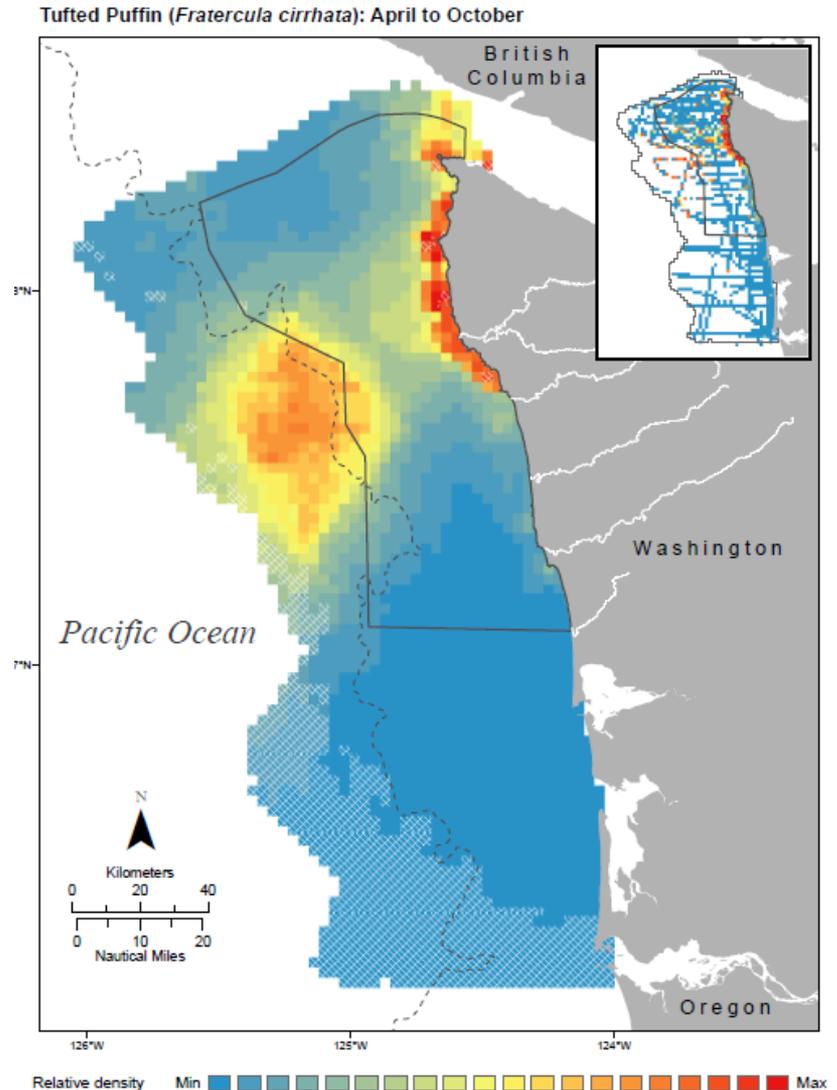
Part 3: Spatial Analyses

- Ecological modeling: seabirds and marine mammals
- Ecologically Important Areas
- Use Analysis

Provides summary of data, methods, results and findings.

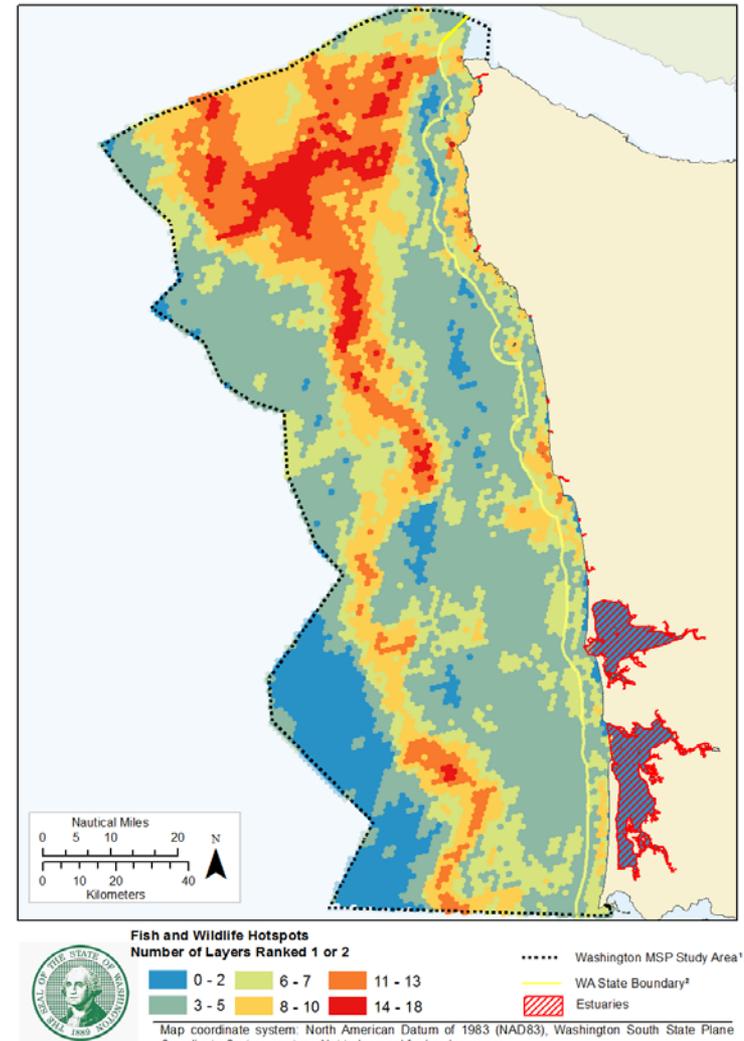
Ecological Modeling

- Compiled existing datasets
 - 8 species of birds
 - 6 species of mammals
 - Environmental variables
- Predicted relative abundance models
- Model performance and uncertainty



Ecologically Important Areas

- 39 individual layers
 - Common spatial resolution
 - Importance score
 - Uncertainty score
- Combined hotspots
- Broad ecological patterns
 - Species/habitat presence and abundance

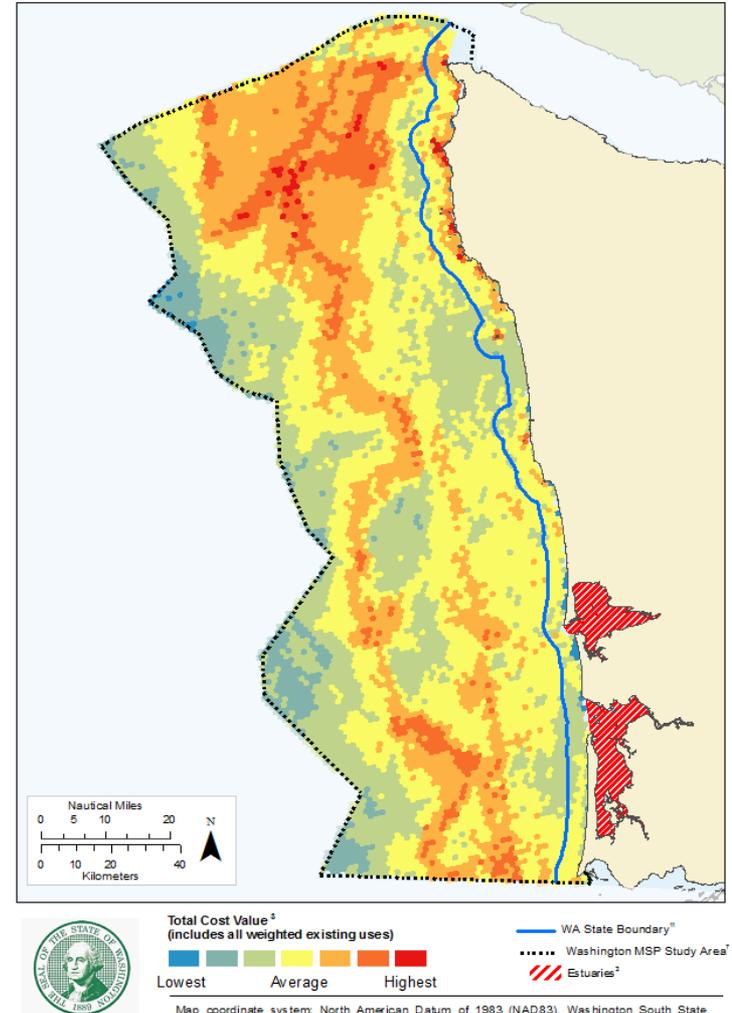


Use Analysis: Inputs

Existing Uses and Ecologically Important Areas Input Map

- Sensitive species, habitats, archaeological/historic sites
 - Crab adjusted for sandy-bottoms
- All other use sectors:
 - Fishing
 - Ecologically Important Areas
 - Recreation
 - Transportation
 - Tug/Tow
- All values included (High, Medium and Low intensities)
- Weighted proportional to their intensity/use score

Map: Cost surface for Use Analysis



Total Cost Value²
(includes all weighted existing uses)

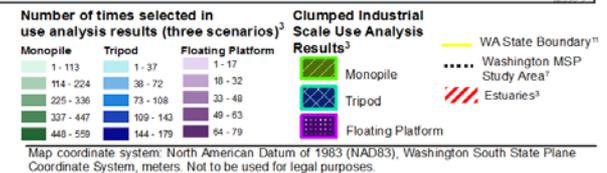
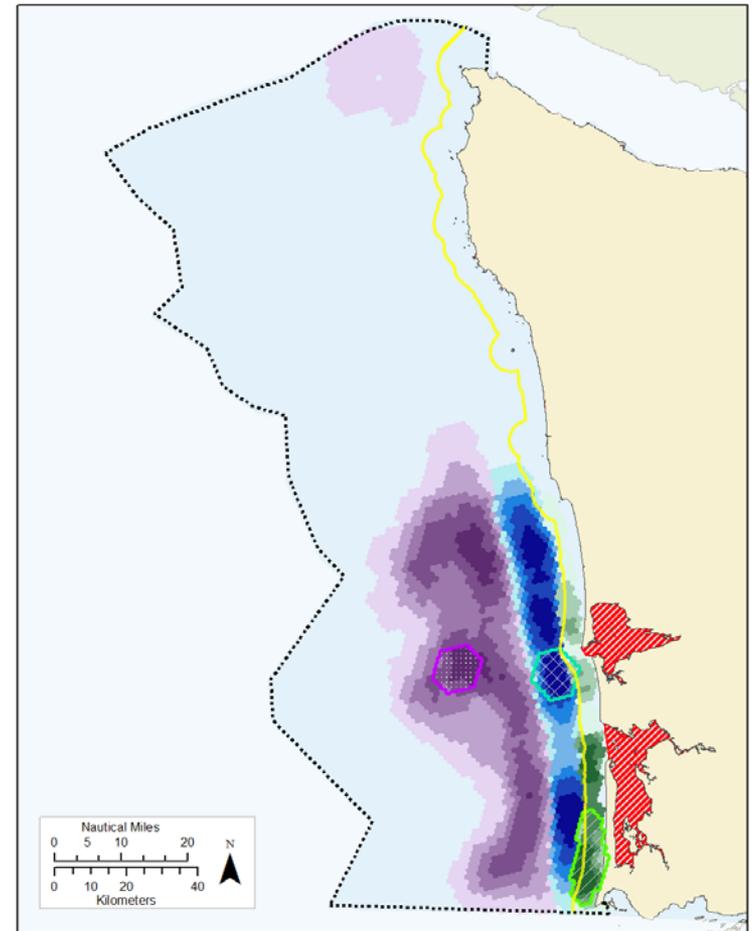
Lowest Average Highest

— WA State Boundary¹
..... Washington MSP Study Area¹
/// Estuaries²

Map coordinate system: North American Datum of 1983 (NAD83), Washington South State Plane Coordinate System, meters. Not to be used for legal purposes.

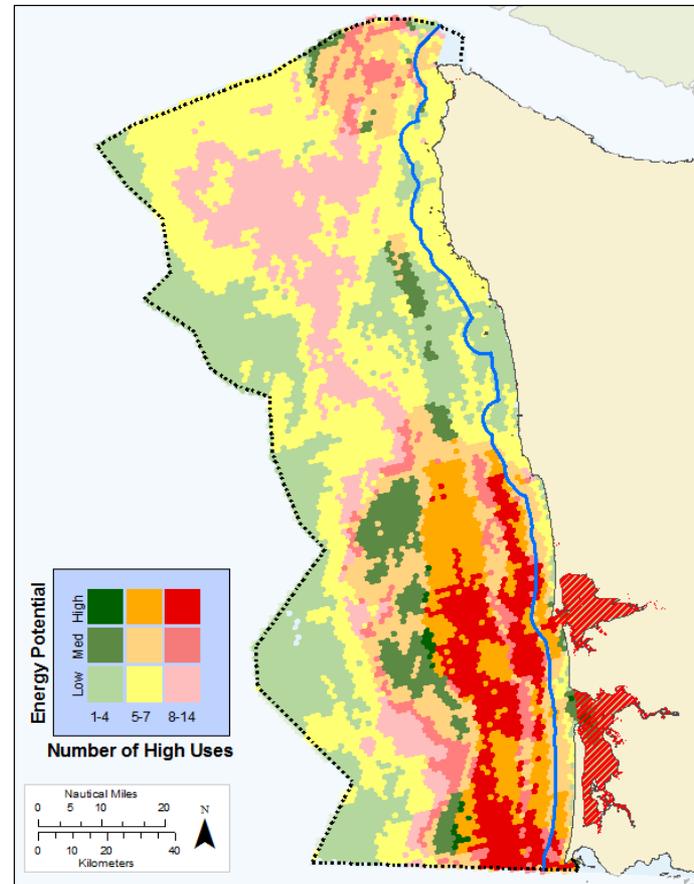
Example: Wind Energy “Industrial Scale”

- Includes all three technology types:
 - Monopile
 - Jacket-mounted
 - Floating
- 300-400 MW scale = approximately 50 square miles.



Energy Potential (wind) and High Uses/Ecological Hotspots

Figure 3.4.2 Renewable Energy Wave Device Suitability (Mid-Depth Energy Device)



..... Washington MSP Study Area¹  Estuaries²  WA State Boundary³

Map coordinate system: North American Datum of 1983 (NAD83), Washington South State Plane Coordinate System, meters. Not to be used for legal purposes.

Plan Outline

Part 1

- Background and Purpose

Part 2

- Context Chapters (Current and Potential Uses)

Part 3

- Ecological & Use Analyses

Part 4

- Management Framework (Recommendations)

Part 5

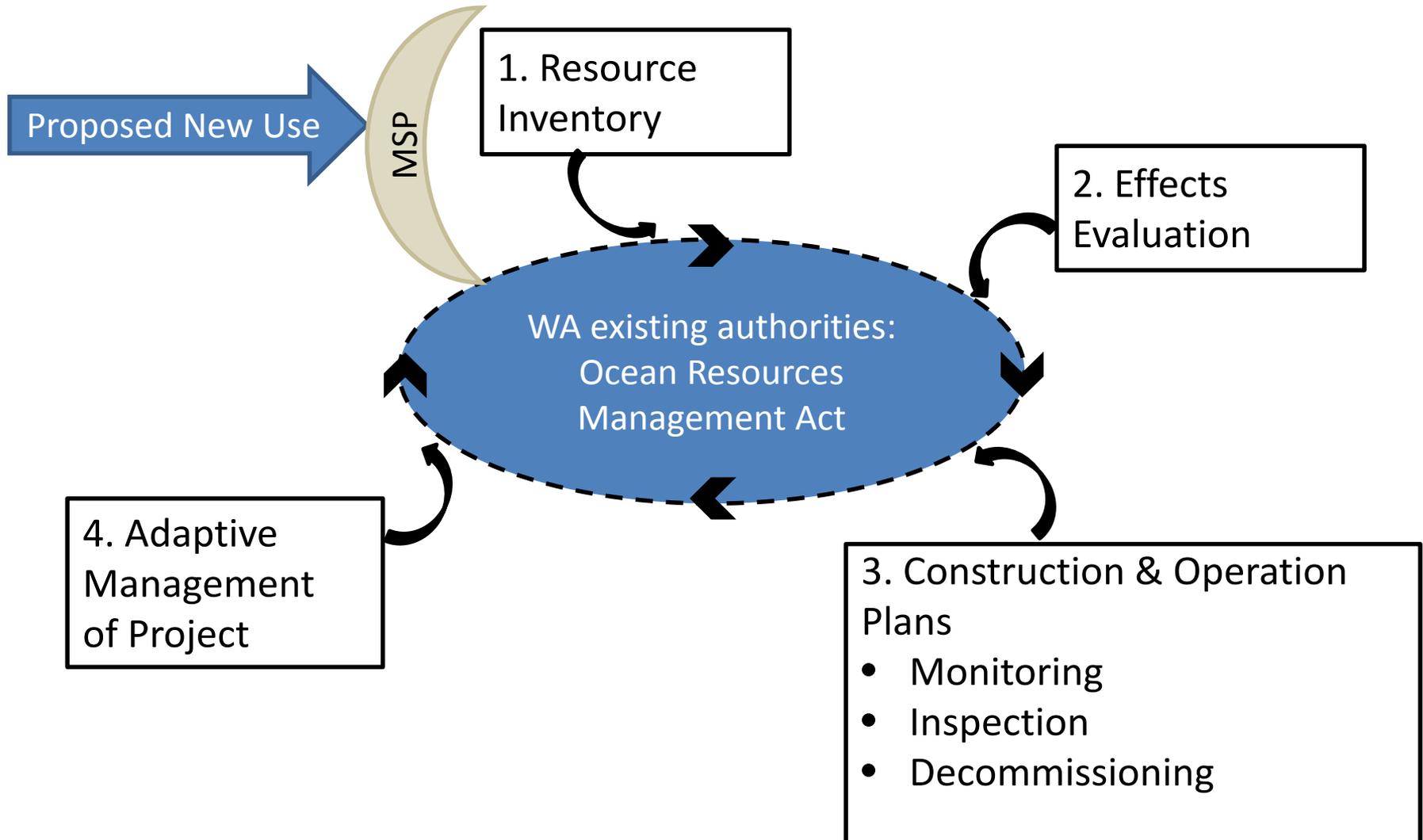
- SEPA (separate document, likely)

Part 4: Management Framework

- Existing laws and regulations
- Processes for coordination and consultation
- Spatial recommendations
- Recommendations for new uses
- Other activities: plan implementation and adaption.

Integrates and references WCMAC's recommendations.

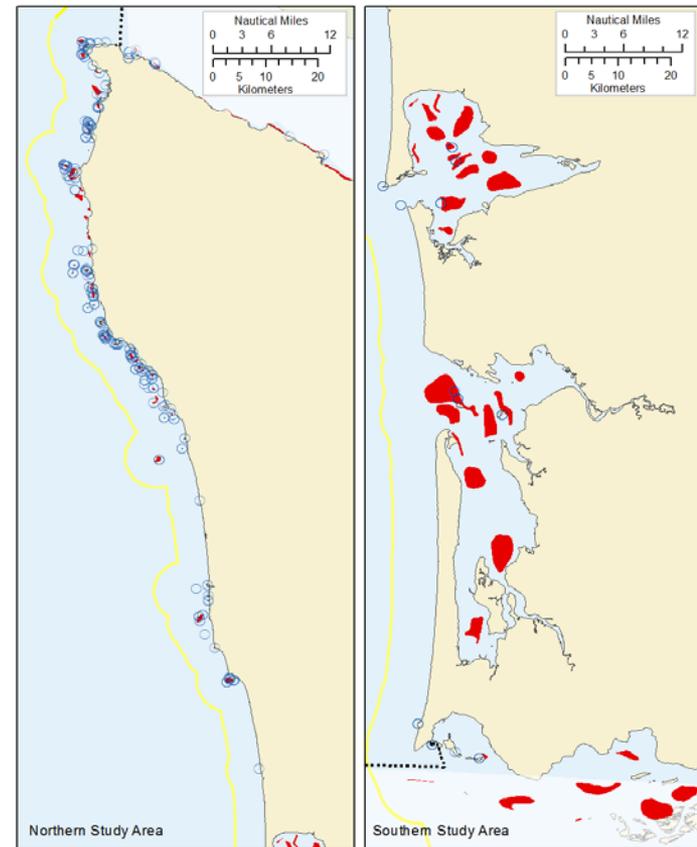
A Plan and A Process



Important, Sensitive, and Unique areas (ISUs) in state waters

- Protect sensitive and unique ecological areas from offshore development.
- Examples: Coral, Kelp, Rocky Reefs, Bird colonies, and Forage Fish Spawning areas.

Map 57: Draft Proposed Important, Sensitive, and Unique Areas: (2 of 4)
Seal and Sea Lion Haulouts and Bird Colonies



- Seabird Colonies³
- Pinniped Haulout Locations³
- Washington MSP Study Area¹
- Washington State Boundary²

Map coordinate system: North American Datum of 1983 (NAD83), Washington South State Plane Coordinate System, meters. Not to be used for legal purposes.

Renewable Energy

- Recommend no industrial-scale projects in state waters to minimize impacts to existing uses and resources.
 - Industrial scale – energy at scale for regional grid (larger production/more devices).
 - Community scale – energy at scale for local community/communities (smaller production/fewer devices) and with support of local community.

Other Ocean Uses

- Evaluate proposed projects on a case-by-case basis.
- Applicants should seek to avoid adverse impacts to existing uses and ecological areas in state waters.
- The greater the number of existing uses and ecologically important areas or the greater intensity of uses or ecologically important areas will likely result in a more difficult permitting process.

Preliminary Draft Review

- Purpose:
 - Understand how parts of the plan are coming together.
 - Provide early input to inform revisions for formal draft for public comment.
- How to comment:
 - Email: msspcomments@ecy.wa.gov



Questions?

www.msp.wa.gov

Jennifer Hennessey

Senior Ocean Planner

Washington Dept. of Ecology

360-407-6595

Jennifer.hennessey@ecy.wa.gov

